# UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MISSOURI EASTERN DIVISION

| INGRAM BARGE COMPANY,               | ) |                        |
|-------------------------------------|---|------------------------|
| Plaintiff,                          | ) |                        |
| v.                                  | ) | Case No. 4:04CV652 RWS |
| LEWIS & CLARK MARINE, INC., et al., | ) |                        |
| Defendants.                         | ) |                        |

### MEMORANDUM AND ORDER

In 2003, a barge owned by Plaintiff Ingram Barge Company (Ingram) sank in the Mississippi River after its cargo of steel coils shifted during transport. Ingram sued Defendant USX Corporation (USX)<sup>1</sup>, who loaded the coils into the barge, and Defendant Lewis & Clark Marine, Inc. (Lewis & Clark) whose tow boat was moving the barge at the time of the mishap. After a bench trial of this case I find that Defendant USX is solely liable for the damages caused to the barge and its cargo. A judgment shall be entered against USX in favor of Ingram in the amount of \$249,526.69 plus prejudgment interest.

### Background

Overview of the case

This case arises from the sinking of one of Ingram's barges in the Mississippi River on October 10, 2003. Ingram is in the business of leasing barges for the shipment of goods on inland rivers. USX manufactures steel coils. Lewis & Clark provide towing and fleeting services for barges on the Mississippi River.

The barge at issue was loaded with steel coils by USX for its customer Cargill Steel and

<sup>&</sup>lt;sup>1</sup> USX was formally known as United States Steel Corporation.

Wire. The barge was of the open hopper type (which means that it had no top cover) identified as OR- 4864. The size of the cargo area was thirty-five feet wide, one hundred-ninety feet long and twelve feet high. On October 2, 2003, the barge was transported by Defendant Lewis & Clark to the dock of Defendant USX for loading. USX loaded 52 steel coils into the barge between October 2, 2006 and October 8, 2006. When the dock workers began their work on October 2nd they did not know how many coils would be loaded into the barge. The loading of the steel coils into the barge was interrupted for several days. The barge was taken away and returned to the dock whereupon the loading was completed. Each coil weighted approximately twenty to twenty-five tons for a total weight of approximately 1,188 tons. The steel was arranged from two to four coils in a row across the width of the barge's hopper floor. To make the barge level and stable in the water, the coils were loaded in a staggered fashion. One row of coils was loaded tightly against one side of the barge wall then the next row was loaded tightly to the opposite wall of the barge. However, none of the rows of coils spanned the entire width of the barge. As a consequence, each row of coils ended from a few feet away, up to over half the width of the barge away, from the opposite side of the barge.

After the barge was loaded it was moved from USX's dock to a fleet of docked barges under Lewis & Clark's control. On October 10, 2003, Lewis & Clark's tow boat, the M/V Miranda Page, was dispatched to move the barge down river. The Miranda Page approached the docked barge from the downstream (south) side. The bow of the tow boat was secured to the bow of the barge. At approximately 12:15 p.m., the tow boat crew released the barge from its anchorage and pushed the barge upstream (north) in preparation of turning around (one hundred and eighty degrees) in the river and heading south. The incident that gave rise to this lawsuit

occurred as the tow boat turned to the east (toward the Illinois shore). As the boat and barge came perpendicular to the river some of the steel coils rolled from the downstream side of the barge to the upstream side of the barge. This caused the barge to list severely and rapidly to the upstream side which, in turn, caused all of the remaining steel coils in the barge to roll to the upstream side. The barge's upstream side listed very low in the water. The pilot of the Miranda Page, concerned that the barge would sink in the main channel of the river, pushed the barge to the east until it became grounded on the Illinois shore.

Despite the efforts of Ingram and Lewis & Clark to save the barge it began filling with river water around 7:30 p.m. and sank later that night.

As the carrier of the cargo, Ingram was liable to Cargill for the loss of the steel coils.

Ingram paid Cargill and received an assignment for any claim concerning the loss of the cargo.

Ingram filed this suit against USX and Lewis & Clark. Ingram alleges that USX was negligent in loading and securing the steel coils in the barge which led to the loss of the barge and its cargo.

Ingram alleges that Lewis & Clark was negligent in failing to detect the steel coils were improperly secured and in failing to pump out any rainwater accumulated in the bottom of the barge that may have contributed to the steel coils becoming unsecured. Ingram seeks damages for the loss of the barge and cargo as well as for the cost of the salvage operations.

Evidence from the trial

The trial of this matter began on September 11, 2006 and the final post-trial briefs were filed on November 15, 2006. The following testimony and evidence was received at trial.

John Crane and John Richie were the two dock workers for USX who loaded the steel coils into the barge. Crane testified that he has loaded steel coils onto barges for USX for more

than ten years. He stated that the steel coils are usually loaded in rows with four coils in each row. The first coil of the first row is loaded against the riverside wall at the bow of the barge. Three more coils follow with each coil touching the one placed before it. Because the last coil typically is loaded past the centerline of the barge, the barge tends to level out somewhat upon placement of the fourth coil. The last coil in each row is secured into place by a three-by-four inch diameter wooden block from twenty-eight to thirty inches long. The next row is loaded against the opposite (dockside) wall of the barge. The remaining rows are staggered down the length of the barge with a goal of finishing the loading with four coils to a row and the barge as level as possible in the water. Even when four coils are placed in each row, the row of coils does not completely extend from one side of the barge to the other. Each row ends several feet short of the opposite side. The distance from the opposite side is even greater if less that four coils are placed in a row.

Crane testified that the USX practice is to place one wooden block at the end of each row before the last coil comes in contact with the hopper floor of the barge. He places the block where he estimates the last coil will pinch it into place. When the last coil is properly placed it pinches the board to the floor and prevents that coil (and presumably the other coils in that row) from rolling as the barge is moved. On occasion Crane has had the last coil relifted to allow him to reposition the block so that it is properly pinched between the coil and floor.

Crane testified that only one USX customer requires wooden blocks to be placed at the base of each individual coil in a row and not just under the last coil.

Crane recalled that there was no extra wood in the subject barge and although there may have been a couple of puddles on the hopper floor there was no standing water.

John Richie testified that he also loaded the subject barge. He has loaded steel coils into barges for more than five years. He testified that steel coils are normally loaded with four coils in a row. He stated that if there was water in a barge the crew coordinator makes the call whether the water needed to be pumped out before the barge was loaded. He testified that he has never seen a barge with water in it after he got done loading it. He remembers little about the subject barge except that it "went out light" which ment to him that it was not a full load.

USX crew coordinator Donald Dahm testified that he has been employed by USX for thirty-three years. His job is to coordinate the dispatch of barges coming to USX's dock to be loaded and he oversees the loading of steel coils into the barges. When the barges are loaded Dahm calls the tow boat company who sends a boat to pick up the barge and place it in their fleet pending further transportation. Once a barge leaves USX's dock, Dahm notifies the barge company that the loading is complete.

Dahm did not recall the loading of the subject barge but he had reviewed the shipping documents. The barge was originally placed for loading at the USX dock on October 2, 2003. The destination of the steel coils was Cargill's facility in Memphis, Tennessee. Fifty two steel coils were loaded in the barge with a total weight of approximately 1,188 tons. Because the loading process was interrupted the coils were not placed four to a row. The barge was taken away from the dock for a couple of days and returned to complete the loading. Ultimately, only two of the eighteen rows contained four coils, the remaining rows had only two or three coils in each row. The loading was completed at 9:00 a.m. on October 8, 2003. Dahm called Lewis & Clark to come and pick up the barge.

In his tenure at USX, Dahm has personally loaded steel coils into barges. His

"preference" is to load four coils in each row. Such an arrangement makes it easier to level the barge. He places a wooden block under the last coil of each row to secure the row. The blocks used are made from oak that are three-by-four inches in diameter and thirty inches in length.

Dahm has experienced occasions when the block was not properly pinched and the standard procedure when this happens is to relift the coil and reposition to block to get it properly pinched between the coil and the hopper floor.

In his deposition, however, Dahm previously testified that on dozens of occassions he had seen blocks that were pushed up against an end coil that were not properly pinched. If this was noticed the solution was to kick the block back into place.

Dahm testified at trial that if there is water in the barge it makes it hard to load the steel. On occasion he has had to call an operator like Lewis & Clark to pump the water out of a barge. USX does not pump water out of barges. On one occasion Dahm observed some water in the bottom of a partially loaded barge that caused a block wedging a coil to float away. He stated that he had never seen this happen on a fully loaded barge when the blocks are fully pinched by the coils.

Pete Schwegel was the pilot of the Miranda Page on the day of the incident. He testified that he was employed by Lewis & Clark since 1997. At the time of the accident he had been a captain for three years and had several additional years of experience as a deckhand and mate employed in moving barges, docking barges and creating a group of barges to be towed up or down river. He was very familiar with the portion of the river where the accident occurred.

On October 10, 2003, Schwegel was assigned to pick up Ingram's barge loaded with USX's steel coils at JB4 in the St. Louis area of the river. He testified the barge was secured to

the riverside south end of a fleet of barges. He approached the barge from the south and secured the bow of his tow boat to the bow of the barge. A member of his crew, Mark Nast, looked down into the barge and told Schwegel that there was a couple of inches of rain water in one corner of the barge. The presence of this water did not cause Schwegel any concern because the barge was lying level and the draft of the barge was light. The free board of the barge (the height of the barge above the waterline) was approximately four and a half feet.

Schwegel testified that the conditions on the river were clear. There was no traffic in the area and the water was low, which generally means a slower current. Because he was facing north and needed to take the barge south, Schwegel pulled out into the river and above "green buoy" turned ninety degrees to go from west to east to turn the barge into the channel heading south. This type of turn is called "topping" around. It is a standard everyday maneuver for a tow boat, a maneuver which Schwegel had performed 1000 to 1500 times as a pilot. When turning around like this in the river, the boat and barge tend to list slightly to the upstream side because of the force of the current.

As soon as he was perpendicular in the river, Schwegel's eye caught sight of two rows of steel coils rolling smoothly from the downstream side of the barge to the upstream side of the barge. He later learned that the coils were rows two and four. After these two rows of coils hit the upstream side of the barge wall, all of the other coils also rolled to the upstream side<sup>2</sup> causing the barge to list severely and a little water came over the top of the barge wall. The barge did not level itself out and one of the wires securing the tow boat to the barge snapped. Fearing the

<sup>&</sup>lt;sup>2</sup> Most rolled smoothly but a few did "jump" as if rolling over the blocks that secured the ends of the rows.

barge would sink in the channel of the river, Schwegel pushed the barge at full throttle toward the Illinois shore. He cut his throttle and let the barge continue into the Illinois bank where it grounded itself still listing heavily to the upstream side of the river.

Schwegel testified there was nothing eventful or unusual about his turn in the river. It was a maneuver he had made many times without incident with other barges loaded with steel coils. He stayed with the barge until the end of his shift at 6:00 p.m. While he was there some river water came over the combing into the wing tanks and some water from the wing tanks leaked into the hopper. He observed through binoculars what appeared to be several two-by-four inch diameter blocks floating in the water on the hopper floor.

Schwegel testified that in his work of moving barges he never got into the hopper of the barge to make sure steel coils were properly secured. That was the job of the loader. No standard exists that requires a tow boat pilot or his crew to make more than a cursory inspection of the cargo in an open hopper barge.

Dan Mueth testified that he was the mate on the Miranda Page at the time the accident occurred. He had worked for Lewis & Clark as a deckhand and a mate for approximately two and a half years at the time. He helped move many barges with steel coils during that period. He testified that he did not see any water in the hopper of the barge when the Miranda Page took the barge into tow. The barge appeared to be level.

Mueth's account of how the accident unfolded is a little different than Schwegel's account. Mueth stated that as the barge was being turned in the river he saw one steel coil shifting slightly back and forth. A second later that coil started to roll to the other side of the barge. When it hit the side of the barge another coil rolled to the same side, hit the wall, and then

all of the remaining coils rolled to the same side of the barge.

Two Lewis & Clark employees testified as to the standard of inspecting a barge before it was taken in tow. Glenn Tipton and Jeremy Prows are mates with several years of experience of moving barges including those loaded with steel coils. Their crew duties did not include inspecting steel coils loaded in a barge's hopper to see if they were properly secured. Their cumulative testimony was that they typically were not allowed to go into the hopper of a barge, the blocks holding the coils could not be seen from above on the walkway of the barge used by the deckhands and mates of a tow boat, and they relied on the loader of the coils to properly secure them.

Ritch Keller is employed by a tow boat company named Osage and has been the pilot of tow boats in the St. Louis area since 1978. He testified that he has moved hundreds of steel coil barges in his work. He has never moved a barge in which steel coils moved or rolled. He testified that the tow boat crew (pilot, deckhand or mate) does not have a duty to inspect whether steel coils loaded in the hopper of a barge are secured. That is the area of expertise of the loader and the tow boat crew relies on the loader to do their job correctly. Even if he was informed that steel coils were missing blocks he would not be concerned. Because he does not know how steel coils should be secured and he would presume that the loader left coils unblocked on purpose.

Addressing the question of how water in the hopper of a barge might effect a load of steel coils, Keller testified that two to three inches of water covering the hopper floor would not concern him. He stated that the standard minimum amount of freeboard needed to move a loaded barge is eighteen inches above the water. He testified that four and a half feet of freeboard, which the barge at issue had, was a light barge and two or three inches of rainwater in

one corner would not be of any concern.

Finally, Keller testified that the maneuver made by the Miranda Page of turning the barge in the river was a typical everyday maneuver. His opined that the crew of the Miranda Page met the standards of good seamanship and that their actions did not cause the accident.

Roland Bourke testified as a witness for Ingram. He has worked in numerous jobs in the barge industry over thirty years. At the time of the accident he was a dispatcher for Ingram who had assigned the subject barge to USX for loading. He testified that as the barge owner, Ingram relies on the loader of steel coils to ensure that the coils are properly secured. In his many years of work with barges he not aware of steel coils rolling in a barge for any reason.

Three marine surveyors testified at the trial. A marine surveyor is an independent professional who is hired by third parties to assess the cause of casualties, the damages and the claims concerned with accidents on waterways. The surveyor can also coordinated the salvage operations of damaged boats, barges and cargo.

William Carrier has been a marine surveyor for thirty-seven years. He was hired by USX after the accident and went to the site a day after the accident occurred. He saw that the barge had been beached and the cargo box had been flooded. During the salvage operations he saw the steel coils being loaded into the recovery barge in rows of four with each individual coil being secured by a four-by-four inch diameter wooden block. He had seen this method of securing each coil on other barges and stated that the four-by-four blocks was the standard size used to secure steel coils in a barge.

John Stockmann was the marine surveyor hired by Lewis & Clark to attend the accident scene. He arrived on site within an hour and a half of the accident. There was not any river

water coming over the top of the barge when he arrived. He took photographs of the barge as it lay grounded and listing in the river. He walked the length of the barge deck and only saw nine pieces of wood blocking throughout the cargo box. Several of the nine blocks Stockman observed were seen under the end coil of rows that had not shifted in the barge. The photographs he took confirmed this testimony. He testified that river water started to flood the cargo hold that evening.

On the following day Stockmann watched the steel coils being transferred into the recovery barge. They were arranged in rows of four coils with each coil secured by a four-by-four inch diameter wooden block. It took three days to unload the steel coils from the barge (two coils were left in the barge because they were unreachable). Stockmann never saw any water flowing out of the cargo bay of the barge and did not observe any blocks floating away.

James Manley has thirty years of experience as a marine surveyor. He was retained by Ingram to attend the accident scene and coordinated the salvage operation. He testified that the training of marine surveyors is done through on-the-job experience. He is a member of the National Association of Marine Surveyors and the American Society of Appraisers. He is experienced in the loading of steel coils into barges and the transfer of coils after they were damaged. His customers rely, upon other things, his expertise to ensure that salvaged steel coils are properly loaded and secured into recovery barges.

He has observed numerous river casualty scenes from barges breaking away from fleets to groundings and other incidents. He has been retained to respond to many river accidents and has rendered opinions as a marine surveyor at several trials. He has been retained innumerable times by third parties to coordinate salvage operations on rivers.

Manley was at the scene of the accident within an hour of its occurrence. He testified that river water stated to flow over the listing wall of the barge into the cargo hopper at 7:30 p.m. He attempted to keep the barge from sinking. The Miranda Page was pumping water out of the barge's hopper. Manley stayed with the barge until the hopper filled with river water and the barge sank sometime later that evening. Throughout the day Manley made extensive notes and took photographs at the scene. He looked for evidence of how the coils were secured and the size of the blocks used by USX.

Manley testified that it is common for marine surveyors retained by different parties to investigate an incident together and to rely on each other's observations at the scene of an accident. The blocks Manley observed on the barge appeared to him to be two-by-four inches in diameter. He stated that he found out later that Stockmann had measured a block and found it to be two-and-three-eighths-by-four inches in diameter. To the best of his knowledge, based on Stockmann's observation, only nine blocks were seen in the barge.

During Manley's years of experience he has observed how companies secure steel coils in barges. In his opinion, coils should be placed in rows of four to reduce the amount of room a potentially lose coil can roll across the bottom of a barge's hopper. Depending on the size of the coils this arrangement leaves approximately four feet from the end of a row to the opposite side of a thirty-five foot wide barge. The more space left between the end of a row of coils and the opposite side of the barge creates a greater potential for a loose coil to cause the barge to list and endanger the rest of the cargo. When coils are placed four in a row, even if they shit or roll, a great deal of weight will still span the center line of the barge because they can only roll approximately four feet. Such an arrangement reduces the list caused by the shifting weight.

Manley testified that the standard size of wood blocks used to secure steel coils in barges is four-by-four inches in diameter. In addition, he opined that the proper securing method requires each coil to be blocked with blocks on both sides of the coil (except for the side of the coil place against the barge wall). He testified that, based on his experience, this is how he has observed steel coils secured ninety percent of the time. The benefit of this method is that if one coil becomes loose due to an improperly placed block, the remaining coils will stay secure.

In his investigation he reviewed the statement of the pilot of the Miranda Page, the United States Coast Guard's report of the incident, the inspection report of the barge conducted before the accident happened, and other logs and documents submitted for his inspection. This was the only accident of which he was aware that was caused by shifting steel coils in the hopper of a barge.

In his deposition Manley previously testified that he did not find that the Miranda Page contributed to the cause of this accident. He specifically stated that he did not believe that any water in the bottom of the hopper contributed to this accident. At the trail Manley did not express any opinion that suggested the crew of the Miranda Page contributed to the loss of the barge and its cargo.

Manley testified that the initial cause of the accident was the unexpected rolling of coils when the barge was topping around in the river. This type of turn is an extremely common maneuver and under normal conditions properly placed blocks prevent steel coils from shifting. The fact that the initial coils shifted indicates that they were improperly secure or not secured at all.

His ultimate opinion was that USX failed to properly configure and/or secure the coils

which led to the loss of the barge and its cargo. The photographs of the barge and the drawing of the placement of steel coils by Schwegel show that only two of the eighteen<sup>3</sup> rows contained four coils. The majority of the remaining rows consisted of three coils. Several rows contained only two coils. Had the coils be placed in rows of four, the shifting of all of the coils would not have caused the barge to list so severely because some substantial weight of each row would have spanned the centerline of the barge.

In addition to the improper configuration of the rolls, Manley testified that USX failed to employ the industry standard of securing the coils with four-by-four inch diameter blocks and blocked both sides of each coil

In support of damages Ingram offered the testimony of Rick Hildreth who is the senior claims manager for Ingram. His duties include the investigation, management, and disposition of claims arising from Ingram's operations. Hildreth testified that he has been employed in assessing claims for twenty-five years and through his training and experience is familiar with the fees and expenses associated with salvage operations in general and with those performed on the OR-4864 barge in particular. He testified to the following costs incurred by Ingram associated with the loss of its barge and cargo:

| Massman Construction Company (salvage)     | 44,810.00                 |
|--|---------------------------|
| River Diving and Survey (divers)           | 12,816.60                 |
| Bussen Terminal                            | 500.00                    |
| Manley Brothers (surveyors)                | 8,290.00                  |
| J.B. Marine Service (salvage support)      | 7,712.00 (three invoices) |
| Lewis & Clark (towing service)             | 7,973.66                  |
| Budwine & Associates (survey of coils)     | 2,885.06 (two invoices)   |
| Cargill Steel (damage to steel coil cargo) | <u>73,539.37</u>          |
|  | \$158,526.69              |

<sup>&</sup>lt;sup>3</sup> Schwegel's drawing only shows seventeen rows.

Hildreth testified that Ingram negotiated with Cargill and ultimately paid for the damage to the steel coils in exchange for an assignment of rights from Cargill. He determined that the above fees were reasonable and caused them to be paid by Ingram. Upon hearing of the OR-4864 being involved in the accident at issue, Hildreth stated that he contacted USX and Lewis & Clark and sought indemnification from them for any loss incurred by Ingram. He testified further that the barge was considered a constructive total loss. He stated that at the time of the accident the scrap value of the barge was \$15,000.00. However, by the time the barge was ultimately sold for scrap two years after the accident, the scrap market prices had improved and the barge was sold for \$33,000.00.

Hildreth also testified that Ingram incurred internal expenses for transporting the barge down river after the accident.

The final element of Ingram's damages was the value of the barge at the time of the accident. Ingram called Wade McGrady to present evidence regarding the value of the barge.

McGrady is a marine surveyor. He is a graduate of the United States Merchant Marine Academy.

He has been employed with John Manley's companies as a surveyor since 1992. He has taken course work on vessel appraisals and has been doing vessel appraisals in his work since 1998.

McGrady arrived at the scene of the barge accident the day after it occurred and stayed until the coils were removed from the barge. He attended the barge in dry dock.

He testified that the appraisal value of a barge is determined by using one of three methods: the cost; the comparable sales; and the income. In his work as an appraiser he has relied, among other factors, on information provided by other marine surveyors in his office.

McGrady used the cost approach which he stated uses some components of the

comparable sales method. He determined that the fair market value of the barge at the time of the accident was \$106,000.00.

Lewis & Clark called Jim Pritchard to testify as to the fair market value of the barge. Prichard, a marine surveyor, used the comparable sales method to determine that the fair market value of the barge was \$90,000.00. However, Pritchard's calculation relied on "fairness parameters" to account for the lack of recent comparable barge sales in the months surrounding the time frame of the accident. The basis of his calculation was the sale price of two barges, different in type than the OR-4864, sold in late 2002 and early 2003. Ingram's barge OR-4864 was built in 1989. The barges Pritchard used for comparison were built in the late '70s and early 80's. His calculation does not reflect a deduction for the scrap value of the barge. In addition, he acknowledged that the approximate scrap value of the barge at the time of the accident was \$15,000.00. He testified that the market value of barges and scrap increased considerably by June of 2005 when the OR-4864 was sold for scrap.

### Findings of Fact

Based on the evidence presented at the trial of this matter I find the following facts:

On October 8, 2003, USX loaded completed loading 52 steel coils into Ingram's barge

OR-4864.

USX's method of securing a row of coils is to place a three-by-four inch diameter by three feet long piece of wood under the last coil and pinching it into place as the last coil is loaded into the barge. If the block is not properly pinched, the coil should be relifted and the block repositioned to ensure a correct fit. However, according to the deposition testimony of USX's crew coordinator, occasionally, if a securing block is loose, it will simply be kicked back

into place.

The standard method of loading such coils is to place them across the wide of the barge in rows of four.

Placing steel coils in rows of four maximizes the leveling of a barge and minimizes the list incurred by a barge if the coils shift in transit. The fourth coil placed in a row will help level a barge because it will be placed on the opposite side of the centerline from the first three coils.

Only two of the eighteen rows of coils loaded into the OR-4864 contained four coils. The vast majority of remaining rows contained three coils and several contained only two coils.

On October 10, 2006, the Miranda Page took the barge into tow. The conditions on the river were clear, no traffic was in the area, the water beneath the boat and barge was sufficiently deep, and the river water in general was low indicating a slower current.

As the barge was being turned in the river, steel coils rolled across the width of the barge to the upstream side causing the remaining rows of coils on the downstream side of the barge to roll to the upstream side of the barge.

There is not any evidence that this movement was initiated by anything other than the typical and uneventful turning of the barge in the river. There is no evidence that wakes from other boats, rouge waves, unusual currents, sandbars, or any other extraneous source influenced the shifting of the steel coils.

The shifting of the coils to the upstream side of the barge caused the barge to list severely to that side. One of the cables securing the tow boat to the barge snapped. Fearing the barge would sink in the channel of the river, the pilot of the tow boat grounded the barge on the Illinois shore.

Despite efforts to prevent the barge from sinking, it took on water and sunk later that night.

Only nine pieces of wooden blocks used to secure the coils were seen in the hopper of the barge. That count includes some blocks that were still wedged under end coils of rows that had not moved. One of the blocks was retrieved and measured two-and-three-eighths-by-four inches in diameter.

The industry standard is to use four-by-four inch diameter blocks to secure steel coils as attested by Carrier and Manley.

Shortly after the accident, Ingram made a demand on USX and Lewis & Clark to indemnify Ingram for the costs associated with the accident.

After the accident the barge was a constructive total loss.

The direct cost incurred by Ingram as a result of the accident was \$158,526.69.

The fair market value of the barge at the time of the accident \$106,000.00.

The scrap value of the barge at the time of the accident was \$15,000.00.

### Conclusions of Law

Liability

Ingram's claim against Lewis & Clark is that it was negligent for not checking that the steel coils in the barge were properly secured. Alternatively, it asserts that Lewis & Clark negligently failed to pump a small amount of rain water from the bottom of the barge's hopper.

No evidence was presented at trial to establish that Lewis and Clark had a duty to inspect that the steel coils were properly secured. The overwhelming evidence was that this is the duty of the loader of the cargo and not of the tow boat crew. As to the effect of the small amount of

rain water present in the hopper, even Ingram's own expert stated that he did not believe that water caused the coils to roll or led to the accident. Because Ingram has not carried its burden of proof establishing any negligence by Lewis & Clark, I find for Lewis & Clark on Ingram's claim.

The evidence at trial presented three grounds for finding USX liable for the ultimate loss of Ingram's barge and its cargo. The first ground is that USX improperly secured the steel coils because the blocks USX used were either improperly placed or were missing, at a minimum, from the initial coils that rolled in the barge.

The pilot of the Miranda Page testified that the initial coils rolled smoothly to the upstream side of the barge which then cause all of the other coils on the downstream side to roll to the upstream side. If blocks had been under the initial coils the expectation would be that the coils would have not rolled smoothly but rather would have been seen to bump over the wooden blocks.

In addition, the one block that was recovered at the scene measured only two-and-three-eighths-by-four inches in diameter. This dimension is smaller than the size of the block USX requires to be used (that being three-by-four inches in diameter). The use of smaller sized blocks could have contributed to the initial coils movement.

The other evidence pointing to improperly placed or missing blocks was the fact that the initial coils rolled at all. The turn made in the river had been made numerous times with steel coil barges by the pilot of the Miranda Page. He has never seen steel coils roll when he has made this maneuver. Nor had any other witness who testified in this case. There were not any conditions on the river that made the barge list any more than normal during such a maneuver. The evidence at trial, based on photographs and the testimony of Stockman and Manley, was that

only nine blocks were in the barge after the accident occurred. That count included some blocks that were seen under the last coil of rows that had not moved.

The cumulative evidence indicates that steel coils do not roll in barges during transport in the absence of unusual circumstances. There was not any evidence presented that the river conditions or the manner in which the Maranda Page was topping around in the river was unusual or contributed in any way to the shifting of the coils. I find that it is more likely than not that USX was negligent because blocks were either misplaced or missing from the initial coils that rolled.

The next ground for finding USX negligent was the configuration of the rows of coils in the barge. Everyone who testified on the issue, including USX's three employees, testified that the standard method was to load four coils to a row. That configuration maximizes the leveling of a barge and minimizes the list incurred by a barge if the coils shift in transit. This is because when placed in rows of four one coil will always be on the opposite side of the centerline of the other three coils in the row which helps keep the barge level.

Only two of the eighteen rows of contained four coils. All of the rest contained three or two coils. The photographs of the barge taken shortly after the incident occurred show it listing and beached on the Illinois shore. The pictures clearly show that only the rows with four coils had one coil placed fully across the centerline on the high side of the barge. The remaining rows' coils only extended from the low side to the centerline of the barge or less. As a result, the overwhelming weight of the cargo as seen in the photographs is concentrated on the upstream side of the barge's centerline. This caused the barge to list severely to that side. That in turn reasonably caused the Miranda Page's pilot to beach the barge to prevent it from sinking in the

channel and tying up river traffic.

It is not surprising that the massive weight of the steel coils on one side of the centerline would cause a severe list. Anyone who has been on any boat knows that loading massive weight to one side of the centerline will cause the boat to list dramatically.

Whatever the cause was of the initial steel coils rolling, had USX loaded the coils in rows of four, as is the standard method, the list of the barge would not have been as severe and the loss would have been averted. That is because even if all of the coils rolled to one side, if they had been arranged in rows of four, some of the coils would remain on the opposite side of the centerline dramatically reducing the list of the barge.

In addition, it is common sense that the extra weight of a fourth coil in a row would have reduced the listing effect caused by the initial coils that rolled due to its effect as a counter weight. Loading the coils four to a row could have prevented the remaining rows from shifting at all.

I find that it is more likely than not that had USX loaded the coils in rows of four, this accident would not have occurred after the initial coils shifted.

The third ground for finding USX negligent is the method it used to secure the steel coils in the barge. USX uses a wood block that is three-by-four inches in diameter and thirty inches long. This block is placed only under the last coil of a row. Marine surveyor's Manley and Carrier both testified that a four-by-four inch diameter wooden block is standard size in the industry used for securing steel coils.

Manley testified that in addition to using four-by-four inch diameter blocks, the industry standard in loading steel coils is to place a block on each side of every coil (except for the side of

the coil touching the side of the barge). The purpose of the additional blocking is to secure each coil independently of the other coils. If the last coil in a row gives way, the others behind it will also tend to shift if they are not individually blocked. This risk is greatly reduced if the coils are independently blocked. Manley opined that had USX employed this method of securing coils it would have greatly reduced the likelihood that the remaining coils would have shifted after the initial coils moved.

USX challenged Manley's qualifications as an expert and the conclusions that he draws. I find that Manley is qualified as an expert under the standards of <u>Daubert</u><sup>4</sup> and <u>Kumho Tire</u><sup>5</sup> and that he has properly supported his opinions. I also find that USX's failure to secure it steel coils in the manner suggested by Manley violated industry standards and contributed to the loss of Ingram's barge and cargo.

Consequently, I find that USX was negligent for its failure to properly secure the steel coils, its failure to configure the load properly, and its failure to conform to industry standards in the method used to secure the coils. I find that these failures individually and collectively resulted in the loss of Ingram's barge and cargo.

#### Damages

The purpose of compensatory damages in tort cases is to place the injured person as nearly as possibly in the condition he would have occupied if the wrong had not occurred. That premise applies to cases that arise in admiralty. <u>Freeport Sulphur Co. v. S/S Hermosa</u>, 526 F.2d 300, 304 (5th Cir. 1976).

<sup>&</sup>lt;sup>4</sup> <u>Daubert v. Merrell Dow Pharmaceuticals, Inc.</u>, 509 U.S. 579 (1993).

<sup>&</sup>lt;sup>5</sup> <u>Kuhmo Tire Co., Ltd. v. Carmichael</u>, 526 U.S. 137 (1999).

"It is long established that the measure of damages for the total loss of a vessel is its market value if, at the time of destruction, the vessel has a market value. See Standard Oil Co. v. S. Pac. Co., 268 U.S. 146, 155 (1925). This market value is established by "recent and comparable sales." See Sawyer v. Poor, 180 F.2d 962, 963 (5 Cir.1950); see also Greer v. United States, 505 F.2d 90, 93 (5 Cir.1974) (market value measured at the point "immediately preceding" the loss). Where no market value has been established, i.e., where sales are insufficient to establish a market, a court may also consider evidence such as replacement cost, depreciation, expert opinion, the amount of insurance, see E.I. DuPont de Nemours & Co., Inc. v. Robin Hood Shifting & Fleeting Serv., Inc., 899 F.2d 377, 379 (5 Cir.1990), the cost of reproduction less depreciation, the vessel's condition, and the uses to which it can be put, see Sawyer, 180 F.2d at 963." M/G-T Services, Inc. v. Turn Services, Inc., 2001 WL 1386065, \*1 (E.D. La., November 6, 2001).

Defendant Lewis & Clark offered the testimony of Pritchard to establish the fair market value of the OR-4864 at the time of its loss. Pritchard's calculation used the comparative sales approach. However, that calculation was severely hampered in that there had not been any contemporaneous sales of similar barges. Pritchard reached his valuation by comparing sales of only two barges that were a different type than the OR-4864, made by different manufacturers and sold in 2002 and early 2003, many months before the date of the accident at issue. The barges used for comparison were built in the late 70's and early 80's while the OR-4864 was built in 1989. In an attempt to reach an assessment of value Pritchard relied on "fairness parameters" to account for the lack of comparable barge sales surrounding the time of the accident.

Based on the lack of a sufficient barge market to establish value through the comparative

sales approach, I find that McGrady's approach more accurately assessed the fair market value of the barge. McGrady reached the valuation of the barge using the cost approach factoring in the depreciated value of the barge which is an acceptable method of valuation.

McGrady concluded that the value of the barge was \$106,000.00. I find that McGrady is qualified as an expert under the standards of <u>Daubert</u><sup>6</sup> and <u>Kumho Tire</u><sup>7</sup> and that he has properly supported his opinions. As a result, Ingram is entitled to recover the fair market value of the barge less the scrape value, that is, \$106,000.00 less \$15,000.00.<sup>8</sup> As a result, Ingram is entitled to recover \$91,000.00 for the barge.

In addition, I find that Ingram incurred damages in the amount of \$158,526.69 as attested to by Rick Hildreth. These damages are fully supported by the record and are reasonable. This figure does not include, and I decline to award, the cost Ingram incurred for transporting the barge from St. Louis, Missouri to Columbus, Kentucky after the accident. The documents recording this cost as \$6,256.50 were not produced in discovery and they do not accurately reflect the actual cost of transporting the barge.

<sup>&</sup>lt;sup>6</sup> Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).

<sup>&</sup>lt;sup>7</sup> <u>Kuhmo Tire Co., Ltd. v. Carmichael</u>, 526 U.S. 137 (1999).

<sup>&</sup>lt;sup>8</sup> I use the \$15,000.00 scrap value which both Pritchard and McGrady testified was the value at the time of the accident. The barge was ultimately sold for scrap two years after the accident for \$33,000.00. At the time the barge was sold for scrap, the market for scrap and barges had risen significantly as attested to by Pritchard and McGrady. It would be inequitable allow a \$33,000.00 scrap deduction from the fair market value calculation of the barge reached by McGrady. That is because barge prices also increased during this time which is not reflected in McGrady's valuation. If the scrap value two years after the accident were to be used then McGrady should be allowed to adjust his calculation to decrease the depreciation factor based on the rising prices of used barges in the market. This would result in a larger fair market valuation of the barge. Ultimately, the use of the \$15,000.00 scrap value is equitable and achieves the goal of putting Ingram in position it would have occupied had its barge not been sunk.

Ingram barge seeks prejudgment interest on its damages. "The grant of prejudgment interest on a claim in admiralty is a matter within the discretion of the district court, but it should be allowed unless there are exceptional or peculiar circumstances which dictate against such an award." Valley Line Co. v. RyanU, 771 F.2d 366, 376 (8th Cir.1985). "The rationale for an award of prejudgment interest is restitution-of fully compensating an injured party for losses suffered and not awarded as a penalty." Id. at 377. Ingram is entitled to recover prejudgment interest on the \$91,000.00 value of the OR-4864 from the date of the accident. In addition, Ingram is entitled to recover prejudgment interest for its expenses it incurred as a result of USX's negligence. Mid-America Transp. Co. Inc. v. Rose Barge Line, Inc., 477 F.2d 914, 916 (8th Cir. 1973). Prejudgment interest on the expenses shall be computed only from the time that these expenditures were actually made by Ingram, that is, at the time of payment. Id.9 The interest rate shall be the federal rate at the time of the accident under 28 U.S.C. § 1961. In re M/V Nicole Trahan, 10 F.3d 1190, 1196 (5th Cir. 1994).

## Conclusion

The loss of Ingram's barge OR-4864 and its cargo was caused by USX's negligence in

<sup>9</sup> Ingram asserts that it is entitled to prejudgment interest on its expenses from the date the accident occurred rather than from the date that these expenses were paid. Ingram relies on Valley Line Co. v. RyanU, 771 F.2d 366, 377 (8th Cir.1985) for this proposition. The Valley Line decision states that an award of prejudgment interest on unliquidated claims that arise before trial is permissible because under admiralty law a loss is presumed to occur all at once and a claimant is entitled to recovery as of the moment of loss. Id. I find that the rule expressed by the Mid-America Transp. Co. decision more clearly addresses prejudgment interest for expenses incurred by a barge owner after a loss and is more applicable to the present case. To the extent there is a conflict in these cases as to the date in which prejudgment interest commences, I am obligated to follow the Mid-America Transp. Co. decision as it has not been overruled by an en banc decision of the Eighth Circuit nor has it been abrogated by a subsequent federal statute or United States Supreme Court decision.

loading and securing the steel coils. The total loss Ingram is entitled to recover is \$249,526.69 (Ingram's expenses associated with the loss plus the fair market value of the barge less scrap value). Ingram is also entitled to recover prejudgment interest on the entire amount calculated as discussed above.

Accordingly,

**IT IS HEREBY ORDERED that** Plaintiff shall have judgment against Defendant USX Corporation in the amount of \$249,526.69 plus prejudgment interest.

IT IS FURTHER ORDERED that any pending motions are DENIED as moot.

RODNEY W. SIPPEL

UNITED STATES DISTRICT JUDGE

Dated this 4th day of January, 2007.